Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of assembling and monitoring an acoustic honeycomb panel comprising a double resonator, the panel ~~(10)~~ consisting of a plurality of layers ~~(20, 30, 40, 50 and 60)~~ to be assembled in the direction of the thickness of the panel ~~(10)~~, namely: an acoustic skin ~~(20)~~, a primary honeycomb ~~(30)~~, a septum ~~(40)~~ pierced with a plurality of holes ~~(42)~~, a secondary honeycomb ~~(50)~~ and a solid skin ~~(60)~~, the method including preliminary operations of gluing the various layers ~~(20, 30, 40, 50 and 60)~~ to be assembled, characterized in that:

- in a first step, the two honeycombs ~~(30, 50)~~ are assembled with the septum ~~(40)~~ by gluing, the subassembly thus obtained being referenced ~~(12)~~, the holes ~~(42)~~ in the septum ~~(40)~~ which are still free being referenced ~~(42b)~~;
- subsequent to the assembly of the two honeycombs ~~(30, 50)~~ with the septum ~~(40)~~ and prior to the assembly of at least one of the two skins ~~(20, 60)~~, at least one of the honeycombs ~~(30, 50)~~ thus being uncovered, the degree of perforation of the septum ~~(42)~~ is monitored by scanning the subassembly ~~(12)~~ with a digital camera ~~(84)~~ including an associated illumination system ~~(88, 96)~~, the camera ~~(84)~~ being arranged on the same side as an uncovered honeycomb ~~(30, 50)~~, the camera ~~(84)~~ thus taking shots of the septum ~~(40)~~ at the bottom of the cells of the uncovered honeycomb ~~(30, 50)~~, this illumination system ~~(88, 96)~~ illuminating the region of the septum ~~(40)~~ observed by the camera ~~(84)~~, the successive images ~~(92)~~ thus obtained being transmitted to a computer ~~(94)~~, the computer ~~(94)~~ analyzing the images ~~(92)~~ and establishing the degree of perforation T of the septum ~~(40)~~ by applying the formula

T = N1/N, in which N1 is the number of pixels ~~(100)~~ corresponding to the free holes ~~(42b)~~ and N is the number of pixels of the image ~~(92)~~.

2. (Currently Amended) The method as claimed in claim 1, characterized in that the septum ~~(40)~~ is monitored prior to the assembly of the two skins ~~(20, 60)~~ and in that the illumination system ~~(88, 96)~~ is a diascopic illumination system ~~(96)~~.

3. (Currently Amended) The method as claimed in claim 1, characterized in that the illumination system ~~(88, 96)~~ is an episcopic illumination system ~~(88)~~.

4. (Currently Amended) The method as claimed in claim 3, characterized in that on the images ~~(92)~~ the computer ~~(94)~~ delimits, inside each cell, the area ~~(76)~~ of the septum ~~(40)~~ not covered by the adhesive ~~(70)~~, this computer ~~(94)~~ searching the pixels ~~(100)~~ corresponding to the free holes ~~(42b)~~ solely within these areas ~~(76)~~.

5. (Currently Amended) The method as claimed in claim 1 ~~any one of claims 1 to 4~~, characterized in that the resolution of the camera ~~(84)~~ and the enlargement ratio of the images ~~(92)~~ is suitable for each hole ~~(42a)~~ in the septum ~~(40)~~ to cover at least 30 pixels ~~(100)~~.

6. (Currently Amended) The method as claimed in claim 1 ~~any one of claims 1 to 5~~, characterized in that the resolution of the camera ~~(84)~~ and the enlargement ratio of the images ~~(92)~~ is suitable for each hole ~~(42a)~~ in the septum ~~(40)~~ to cover at least 75 pixels ~~(100)~~.

7. (Currently Amended) The method as claimed in ~~claim 1 any one of claims 1 to 6~~, characterized in that it is interrupted when the monitoring operation on the assembled

septum ~~(40)~~ shows that it is defective.

8. (Currently Amended) The method as claimed in claim 1 ~~any one of claims 1 to 7~~, characterized in that the solid skin ~~(60)~~ is produced and glued on the secondary honeycomb ~~(50)~~ in a single operation.

9. (Currently Amended) The method as claimed in claim 1 ~~any one of claims 1 to 8~~, characterized in that, prior to the assembly of the septum ~~(40)~~ with at least one of the honeycombs ~~(30, 50)~~, the degree of perforation T of the bare septum ~~(40)~~ is monitored by scanning the septum ~~(40)~~ with a digital camera ~~(84)~~ including an associated illumination system ~~(88, 96)~~, this illumination system ~~(88, 96)~~ illuminating the region of the septum ~~(40)~~ observed by the camera ~~(84)~~, the successive images ~~(92)~~ thus obtained being transmitted to a computer ~~(94)~~, the computer establishing the degree of perforation T by applying the formula $T = N1/N$, in which N1 is the number of pixels ~~(100)~~ corresponding to the holes 42 and N is the number of pixels of the image ~~(92)~~.

10. (Currently Amended) The method as claimed in claim 9, characterized in that the assembly of the panel ~~(10)~~ is interrupted when the monitoring operation on the bare septum ~~(40)~~ shows that this septum ~~(40)~~ is defective.

11. (Currently Amended) The method as claimed in claim 9 ~~claim 9 or 10~~, characterized in that the resolution of the camera ~~(84)~~ and the enlargement ratio of the images ~~(92)~~ is suitable for each hole ~~(42a)~~ in the septum ~~(40)~~ to cover at least 30 pixels ~~(100)~~.

12. (Currently Amended) The method as claimed in claim 9 ~~any one of claims 9 to 11~~, characterized in that the resolution of the camera ~~(84)~~ and the enlargement ratio of the images ~~(92)~~ is suitable for each hole ~~(42a)~~ in the septum ~~(40)~~ to cover at least 75 pixels ~~(100)~~.